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N NO.		
EXAMINER		
DATSKOVSKIY, MICHAEL V		
BER		
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DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)				
Office Action Summans	10/627,785	LEE ET AL.				
Office Action Summary	Examiner	Art Unit				
	Michael V. Datskovskiy	2835				
The MAILING DATE of this communication apprend for Reply	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 25 Ju	<u>ly 2003</u> .					
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This	action is non-final.					
3) Since this application is in condition for allowan			e merits is			
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	3 O.G. 213.				
Disposition of Claims						
4) Claim(s) 1-19 is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6) Claim(s) <u>1 and 4-18</u> is/are rejected.						
7) Claim(s) 2,3 and 19 is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9) The specification is objected to by the Examiner						
10)⊠ The drawing(s) filed on <u>25 July 2003</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a)⊠ All b)□ Some * c)□ None of:						
1.⊠ Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)  1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date						
) 🔀 Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) 🔲 Notice of Informal Patent Application (PTO-152)						
Paper No(s)/Mail Date <u>07/25/2003</u> . 6) Uther:						

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1, 4-5, 7-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Choudhury et al (US Patent 6,058,014).

Choudhury et al teach a heat sink assembly 100, Figs. 1-8, comprising: a heat sink 105; a support module 116 having engaging means; a clip 150 attaching the heat sink onto an electronic package 102, the clip comprising: a main body comprising a longitudinal portion 156, a post 162, and a resilient element 171, the main body comprising first and second locking arms 154, a through aperture 167, each of the locking arms defining second engaging means 160 to engage with the first engaging means of the support module 116, the post 162 extending through the aperture 167 and having a pressing portion 164 at a bottom thereof and a head 166 at the top, said pressing portion pressing onto the heat sink 105, and said resilient element is a coil spring located around said shaft 162 and abutting said pressing portion 164. Choudhury et al teach furthermore said aperture 167 has a diameter slightly bigger that diameter of said shaft 162, wherein said pressing portion is a cap interferentially engaged with the main shaft 162 of the post 152.

Claim Rejections - 35 USC § 103

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3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claim 6, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Choudhury et al in view of Sloan et al.

Choudhury et al teach all the limitation of the claim except said heat sink comprising an elongated slot, and said pressing cap of the shaft is threadedly engaged with the shaft. Sloan et al teach a heat sink assembly comprising a heat sink 42, a clip 36 and a shaft 40 connected to said clip and pressing said heat sink 42 onto a bottom of slot 42a, wherein a cap 38 is threadedly engaged with said shaft 40. It would have been obvious to one skilled in the art at the time invention was made to employ a heat sink with a slot, and to threadedly engage said pressing cap with said shaft 40, as it is shown by Sloan et al in the device by Choudhury et al in order to provide a secure engagement of the heat sink with the pressing cap of the clip 36 and to make said shaft easier to make.

## Allowable Subject Matter

- 5. Claims 2-3 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 6. The following is a statement of reasons for the indication of allowable subject matter: Said second arm of the clip is detachably engaged with a corresponding end of

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the longitudinal portion (claim 2), and comprises a handle at an end thereof (claim 3);

The lower end of the post is located in a hole of the heat sink under said slot.

- 7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: McIntyre (US Patent 5,932,925); Lee et al (US Patent 6,724,632); Letournean (US Patent 6,462,951); Lin et al (US Patent 6,412,546) and Liu (US Patent 6,809,929).
- 8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael V. Datskovskiy whose telephone number is (571) 272-2040. The examiner can normally be reached on 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on (571) 272-2092. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

My Doutsleig

Michael V Datskovskiy
Primary Examiner
Art Unit 2835

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